

# Enterprise Risk Management Manual

CTS Global Equity Group, Inc.

February 2022



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## EFFECTIVITY & REVIEW

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The Compliance Department is responsible for all documentation control and maintenance.

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All documentation should be clearly marked with a unique reference number, time of receipt, an issue, and the date of issue.

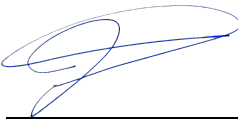

Any changes to documents are reviewed and approved by the Chief Risk Officer and recorded in a change log.

Revised documents are distributed to all previous holders within the Company.

Upon the issue of the revised documentation all previous issues of that document are returned to the Chief Risk Officer or her nominee for safekeeping. Should a document still be required for future reference it is clearly marked 'obsolete- for reference only.'

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Any copies of controlled documents which are not subject to this document control procedure are marked 'uncontrolled copy.'

	<b>Name</b>	<b>Designation</b>	<b>Signature</b>	<b>Date</b>
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**AMENDMENT LOG**

<u>Amendment No.</u>	<u>Section No.</u>	<u>Revision Status</u>	<u>Details of Amendment</u>	<u>Date</u>
1	All	1.1	Updating to reflect the additional risks of the Company	01/29/2016
2	All	2.0	Updating to reflect the additional risks of the Company	02/02/2016
3	All	3.0	Updating to align the Company's enterprise risk management program with ISO 31000:2018	11/30/2021
4	Annex "A"	4.0	Updating to reflect the additional risks of the Company	02/28/2022

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## **I. INTRODUCTION**

### **A. Risk Management Policy Statement**

The analysis of risk and the identification of opportunities in evolving situations are inherent to the business of a stock brokerage. A stock brokerage does not avoid risk so much as engage it, identifying factors, isolating trends, and maneuvering its clients into advantageous positions.

This is an attitude towards risk that CTS Global Equity Group, Inc. (“CTS” or the “Company”) carries into its corporate affairs. In line with the principle that managed risk presents opportunity, CTS endeavors to create an environment where a chain of command and clear division of responsibilities allows employees to exercise supervised initiative, allowing for the controlled evolution of established systems. These systems and processes are regularly evaluated and subject to audits intended to streamline the procedures, eliminate loopholes, and improve responsiveness.

### **B. Enterprise Risk Management Manual**

This Enterprise Risk Management Manual (“Manual”) provides the guidelines, policies, and procedures to be followed by the Company to manage its risks while carrying out its business activities. The objective of this Manual is to effectively manage the various risks faced by CTS in its business operations, including, among others, those that arise in its client related activities, limit and exposure settings, and technology.

This document shall be used as guidelines and reference by the key personnel in charge of, among others, the following:

- Clients
- Setting of Client Default Risks
- Collection and maintenance of Margins
- Operations and Accounting
- Human Resources / Manpower
- Information Technology and Infrastructure

The Chief Risk Officer, through the Compliance Department, shall provide a copy of this document to all concerned personnel from time to time and explain the contents and their responsibilities in this regard.

## II. DEFINITION OF TERMS

<i>“CTS” or the “Company”</i>	refers to CTS Global Equity Group, Inc.
<i>“Consequence”</i>	refers to the outcome of an event affecting the Company’s objectives
<i>“Control”</i>	refers to the measures taken to maintain and/or modify risk
<i>“Enterprise Risk Management” or “ERM”</i>	refers to an enterprise-wide strategy to identify and prepare for potential events which may expose the Company to risk
<i>“Event”</i>	refers to the occurrence or change in a particular set of circumstances
<i>“Manual”</i>	refers to the Enterprise Risk Management Manual of the Company
<i>“Risk”</i>	refers to the effect of uncertainty on objectives
<i>“Risk Management”</i>	refers to the coordinated activities to direct and control the Company with regards to its risks
<i>“Stakeholder”</i>	refers to a person that can affect, be affected by, or perceive themselves to be affected by a decision or activity of the Company
<i>“Top Management”</i>	refers to the Company’s Board of Directors and senior management

### III. ERM PRINCIPLES

The Company's ERM framework was adopted to assist the Company and its various units to integrate risk management in its significant activities and functions, including decision-making.

In crafting its ERM framework, the Company customized the risk management principles as enumerated in ISO 31000:2018 in light of the unique business environment of the organization and its business units. These principles, as aligned with the Company's objectives, are as follows:

1. ERM is an integral part of all Company activities.
2. ERM should be approached in a structured and comprehensive manner.
3. The ERM framework must take into consideration and be proportional to the Company's external and internal environment and objectives.
4. An effective ERM requires awareness of the concerns of affected stakeholders which can be achieved through timely engagement to understand their knowledge, views, and perceptions.
5. An effective ERM must timely anticipate, detect, acknowledge, and respond to changes and events which may affect risk.
6. ERM must take into account the best available information, including historical data, current information, and future expectations.
7. To be effective, ERM must take into consideration the variable and dynamic nature of human behavior and cultural factors.
8. Risk management is iterative and is improved through continuous learning and experience.

#### IV. ERM FRAMEWORK

Below are the components of the Company's ERM framework:

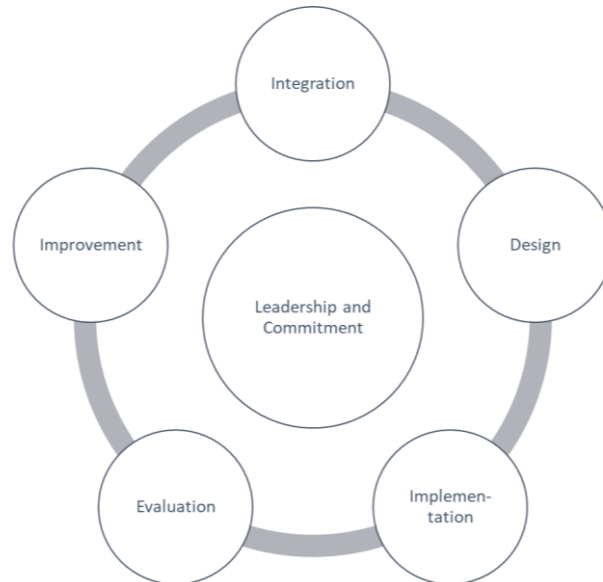


Figure 1. CTS ERM Framework

##### A. Leadership and Commitment

The ERM framework is anchored on the leadership and commitment of the Company's Board of Directors and senior management to integrate risk management into all organizational activities. While the Audit Committee shall act as the ERM champion, all members of top management shall be responsible for demonstrating their commitment to this purpose.

In particular, the Board of Directors is charged with overseeing the overall risk management of the Company. This involves ensuring that risks are considered in setting and pursuing Company objectives, that these risks are proportional and appropriate in the context of the Company's objectives, that the ERM framework is being implemented effectively, and that information affecting risk is properly communicated to the appropriate parties.

For senior management, their leadership and commitment are best portrayed by adopting this framework in all components of their respective fields of responsibility, allocating needed resources in order to effectively implement the ERM framework, and assigning authority, responsibility, and accountability at appropriate levels within their respective business unit areas.



## **B. Integrating Risk Management**

ERM is an integral part of all Company activities and must be embedded in every part of the Company's structure including its purpose, goals, objectives, and operations. This is only possible if risk management is seen as a shared duty of all Company personnel. Everyone in the organization is a risk manager and has the duty to help the Company manage its risk.

To guide personnel to make decisions towards sustainable strategies that ensure Company longevity and viability, a proper governance structure must also be in place. Governance includes determining risk management accountability and roles.

Integrating risk management into the culture of the Company is a dynamic and iterative process. Risk management must be present in all aspects of the organization, from its purpose to its leadership and governance, from its objectives to its operational strategies and operations.

## **C. ERM Design**

Designing the Company's ERM framework requires: (i) understanding the Company and its context; (ii) articulating its commitment to risk management; (iii) assigning roles, responsibilities, and accountabilities within the organization; (iv) allocating the appropriate resources towards risk management; and (v) establishing communication and consultation to support the framework.

### **1. Company Environment**

The Company must understand the internal and external environment within which it operates. This requires a study of external factors, which include, among others, the social, cultural, political, economic, legal, regulatory, and technological factors in both the international, national, and local levels; its relationships with and the perceptions, values, needs, and expectations of its various stakeholders; and trends in the industry. The Company must also consider the internal context within which it operates which includes, but is not limited to, its purpose, mission, vision, company values, structure, objectives, company culture, data systems and information flows, and its relationships with and the values and perceptions of its internal stakeholders such as its employees and agents.

### **2. Articulated Commitment to Risk Management**

It is critical that the Company's commitment to risk management be articulated in a policy or statement that can be cascaded to the different stakeholders within and beyond the organization. This helps in the development of a common risk language to be understood across the organization.

### **3. Risk Management Governance Structure**

A governance structure must be established to clearly assign roles, responsibilities, and accountabilities within the Company.

### **4. Risk Management Resources**

Appropriate resources must be allocated to support the successful implementation of the ERM framework. These resources include, but are not limited to, devoting sufficient manpower and training towards the achievement of the Company's risk management objectives.

### **5. Timely Communication and Consultation with Stakeholders**

There must be an established and approved approach to timely communication and consultation with stakeholders. Communication requires sharing information with stakeholders, while consultation involves asking for and listening to feedback from stakeholders and considering these responses in crafting the organization's activities.

## **D. Implementation of ERM Framework**

To implement the ERM framework, the Company must develop an appropriate plan together with the resources needed. The plan should clearly state where, when, and how different types of decisions are made which impact risks and who makes such determination. As ERM is iterative, the plan should be dynamic and allow for modification where needed. The ERM framework must be cascaded and communicated to all concerned stakeholders to ensure that the Company's practices are well-understood and its policies are implemented.

## **E. Evaluation, Monitoring, and Review**

The ERM framework must be periodically evaluated to measure its performance against its intended purpose to determine whether revisions need to be made to better support the objectives of the Company.

## **F. Improvement**

Based on the results of the evaluation, the Company may revisit the ERM framework to address any changes in its internal and external environment and to further enhance the suitability, adequacy, and effectiveness of the program. Any such enhancements must be communicated to the relevant stakeholders to ensure proper accountability and implementation.

## V. ERM PROCESS

The Company's ERM process which is aligned to ISO 31000:2018, involves the systematic application of policies, procedures, and practices to the following activities: (i) communication and consultation; (ii) establishment of the scope, context, and criteria; (iii) review and monitor of the risk; and (iv) documentation and proper reporting of the risk.

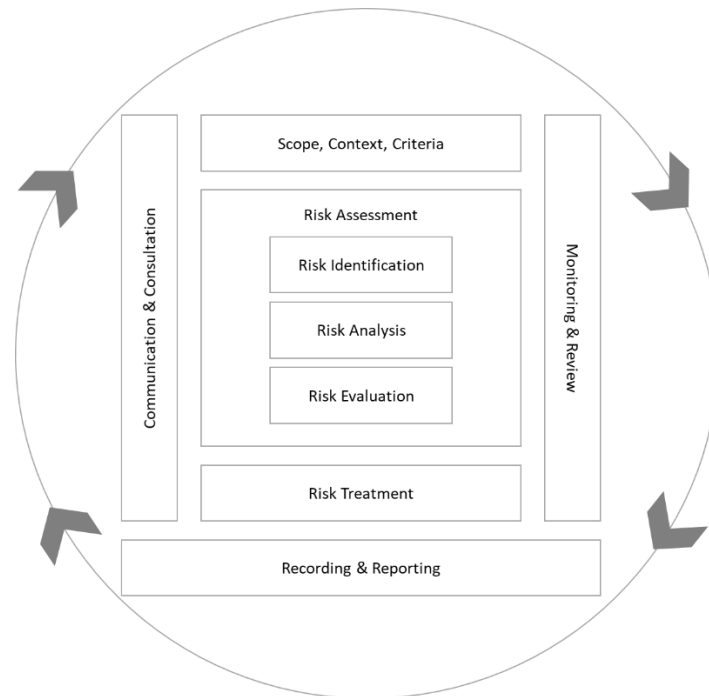


Figure 2. CTS ERM Process

### A. Communication and Consultation

As previously mentioned, an established and approved approach to timely communication and consultation with stakeholders is critical to the creation of the ERM framework. Communication and consultation with stakeholders, both external and internal, should take place at every step of the risk management process. This allows different views, experiences, and fields of expertise to be considered when defining risk criteria, evaluating risks, and engaging in decision-making. An open line of communication between the Company and its stakeholders will also build a feeling of inclusiveness and ownership of the ERM process – this will support the risk management culture that the Company seeks to inculcate at every level of the organization.

## **B. Scope, Context, and Criteria**

As risk management can be applied at different levels, it is crucial that the Company establish first the scope of its risk management activities. This will allow the Company to adopt its approach to the requirements of the activities in consideration.

The Company believes that the ERM framework should be applied at a strategic level as well as an operational level. This will ensure that the risks of all strategies and special projects that will be undertaken by the Company, as well as its day-to-day operations and processes, are properly evaluated and mitigated.

However, the ERM framework cannot be implemented in a vacuum. For an effective implementation, the ERM framework must take into consideration the internal and external context to which the risk management process will be applied. The list of factors that must be considered have been discussed previously in this Manual. All of these factors must be reviewed periodically as part of the evaluation of the Company's ERM framework.

Further, it is critical that the Company identify its risk criteria, which will serve as a tool for it to evaluate the significance of each risk, as well as what types of risk and levels of risk the Company is willing to accept for each activity. To determine risk criteria, the Company must review factors such as, among others: (i) the nature and types of uncertainties that can impact outcomes and objectives; (ii) how to measure consequences and their probabilities; (iii) timing issues; (iv) metrics to be used; (v) determination of risk levels; (vi) how risks and combination of risks will be assessed; and (vii) the Company's risk appetite.

## **C. Risk Assessment**

Risk assessment involves identifying the risks, understanding them, and evaluating them against the established risk criteria.

### **1. Risk Identification**

The Company must first identify the potential risks before it can analyze and evaluate them. During the process of risk identification, the Company determines and describes the risks that might affect the attainment of its objectives.

In general, the Company faces two types of risks: systemic risk and unsystematic risk. Systemic risks relate to market-related risks, are macro and external in nature, and are beyond the control of the Company. On the other hand, unsystematic risks are risks specific to the Company, are micro and internal in nature, and are within the control of the Company.

Systemic risks include, among others, the following risks:

- a. Interest rate risk which arises due to the changes of interest rates from time to time;
- b. Market risk, otherwise known as position risk, which is associated with the fluctuations in the trading price of securities; and
- c. Purchasing power or inflationary risk which arises due to the increase in prices of goods and services.

On the other hand, unsystematic risks include the following risks, among others:

- a. Business risk or liquidity risk which may be the risk that the Company will be unable to unwind a position in a financial instrument at or near its market value (asset liquidity risk) or the risk that the Company cannot obtain the necessary funding to meet its financial obligations as they fall due (funding liquidity risk);
- b. Credit risk or default risk which refers to the risk associated with the ability of debtors to pay the interest and principal as they fall due; and
- c. Operational risks including large exposure risk (exposure by the Company to a proportionally large amount of exposure to a particular counterparty, single issuer of debt, or single equity security or single issuer group), settlement risk (risk of a counterparty not delivering a security or its value in cash), or counterparty risk (risk of a counterparty defaulting on its financial obligation).

A few of the potential systemic and unsystematic risks faced by the Company is attached to this Manual as Annex "A".

## **2. Risk Analysis**

After identifying the risks, the Company must seek to understand fully the nature of these risks and their characteristics. This includes grasping the level of risk that the Company is exposed to. The degree of detail and complexity involved in risk analysis will depend on various factors, including the purpose of the analysis, the availability and reliability of information, and the available resources. Analysis may be done on a qualitative or quantitative level, or both.

In conducting risk analysis, factors such as the likelihood of events and their consequences, the severity of these consequences, the complexity and interconnection between events, timing issues, effectivity of existing controls, and the sensitivity of the data involved must be taken into consideration. In analyzing risk, it is also imperative to understand that there are many circumstances which may affect the understanding of the risk, including opinions, biases, quality of information used, assumptions made, and techniques utilized.

The analysis of the risks identified by the Company is also included in Annex "A".

### **3. Risk Evaluation**

The outcome of the risk analysis will be used to support the decisions made upon risk evaluation. During risk evaluation, the results of risk analysis will be compared against the risk criteria of the Company to determine the decisions that have to be made with respect to such risk. These decisions include whether or not the risks need to be addressed and if so, how these risks should be managed.

#### **D. Risk Treatment**

If, based on the risk evaluation, the risk needs to be addressed, the Company will determine the best option to treat the risk. Risk treatment is an iterative process where strategies are developed and actions are implemented to address the identified risks. It involves formulating and selecting the risk treatment options, planning and implementing said options, assessing the effectivity of the measures implemented, reviewing if the residual risk still needs to be addressed and if so, implementing further treatment.

Risk treatment requires an assessment of the potential benefits of the risk treatment option against the resources needed as well as the potential disadvantages and new risks brought about by its implementation. It also requires a firm grounding on the Company's purpose, mission, vision, values, and objectives together with an understanding of stakeholder views and resources available.

Further, once the risk treatment option has been implemented, there is a need to reassess the residual risks to determine whether or not additional treatment is needed.

#### **E. Monitoring and Review**

Monitoring and review of the ERM framework is necessary to improve its quality and effectiveness. This should be done in all stages of the process and includes planning, data gathering, data analysis, recording of results, and providing feedback to the necessary parties.

The Company's risk policies and procedures will be subject to regular review on an annual basis or when there are significant changes to the products, segments, services or relevant legislation, rules or regulations that might impact the Company's risk exposure.

#### **F. Recording and Reporting**

The ERM process and its results must be reported through the proper channels. This allows the risk management activities and outcomes to be reported across the Company, to provide information to the necessary parties for decision making, allow for the improvement of the ERM activities, and assist in the dialogue among stakeholders.

## **Annex "A"**

### **Systemic and Unsystematic Risks**

#### **1. Client Risk**

There exists the possibility of client fraud which could lead to accounts being used for money laundering and other illegal activities. To reduce this risk, the Company instituted strict account opening and know your client policies consistent with the requirements of its regulators, including the Securities and Exchange Commission, Anti-Money Laundering Council, and the Capital Markets Integrity Corporation.

The Company's account opening process involves:

- a. Completion of account opening forms;
- b. Submission of a valid government issued identification card;
- c. Conduct of client verification, including, among others, face-to-face contact;
- d. Submission of other additional documents which the Company may, in its discretion, require; and
- e. Funding the account before the client is allowed to trade.

Trained account officers review and ensure that all procedures are followed before an applicant is onboarded as a client. After onboarding, CTS conducts ongoing monitoring of its clients, including requesting clients to update their information every two years or as may be required by the Company.

#### **2. Credit Risk**

Virtually all capital markets and trading transactions are exposed to credit risk. Credit risk is the risk of economic loss from the failure of the obligor to perform the terms and conditions of a contract or agreement. It is inherent to the stock brokerage business as potential losses may arise due to the failure of its customers and counterparties to fulfill their trading obligations on settlement dates or the possibility that the value of collateral held to secure obligations becoming inadequate due to adverse market conditions.

The main risk associated with the traditional brokerage account set up on a day-to-day basis is on the non-collection of cash payments for buying transactions and the failure to receive shares for selling transactions. An execution or dealing risk also exists that is specific only to requirements and needs of clients arising from arithmetical, computational, and human errors in the order taking, dealing, execution and confirmation process which can result to transaction losses. To address these risks, the Company implements the know-your-customer rule. Salesmen are reminded to ensure that any transactions executed on behalf of their clients should be, among others, aligned with the financial capability and risk appetite of said client. Further, the Company only has cash accounts and does not allow margin financing.

### 3. Order Risk

To manage the general risk of clients not being able to settle their buy or selling obligations, the Company implemented the following limits to manage its order-related risks:

#### *a. Buying Transactions*

Clients and their traders are provided a maximum buy order limit. Traders can only place buying orders up to the amount in their available buying order limit. Every time a buying order is accepted by the system, the available buying power of the particular client is automatically reduced by the purchase amount inclusive of all related taxes and commissions. When the buying order is matched by the PSE, the corresponding matched amount is deducted from the client's buying limit and the shares bought are added to the stock position of the client.

#### *b. Selling Transactions*

Clients and their traders are only allowed to sell shares of stocks which are in their portfolio. When a trader enters a sell order, the system automatically checks if the client has shares sufficient to cover the transaction. If there are enough shares, the available number of shares of the client for the particular stock is deducted by the total number of order shares. When the sell order is matched, the matched volume is deducted from the actual number of shares of the stock sold by the client. The corresponding proceeds of the sale less all the taxes and commissions are then added to the cash position of the client.

#### *c. Global Per Order Limit*

The global per order limit in the system is an additional parameter that only allows orders, whether buying or selling, which are within the global per order limit value. This ensures that if a trader accidentally enters a wrong value for a buy order or the wrong number of shares for a sell order, the client's maximum exposure (if they have the buying and selling capacity) is capped to the maximum limit.

#### *d. Per-User Order Limit*

Clients and their traders are allowed to either increase or decrease the value of their per order limit depending on their financial capacity and risk appetite.

#### *e. Price Limits*

Buying and selling transactions are limited by the following price parameters per stock:

- i. Dynamic Threshold High



- ii. Dynamic Threshold Low
- iii. Ceiling Price
- iv. Floor Price

Orders which exceed the corresponding parameters are automatically rejected by the system.

*f. Automatic Checking for Wash Sale Condition*

Whenever a trader enters an order, the system automatically checks for a wash sale condition. To illustrate, if a trader sells shares of stocks at price A and later on buys the same number or more shares of the same stock at a higher price later on, the system recognizes this as a wash sale and disallows the corresponding buy transaction.

*g. Automatic Checking for Possible Duplicate Orders*

The Company's system has a built-in mechanism for checking for possible duplicate orders. Whenever a trader enters an order (whether buying or selling) the system automatically checks whether the trader has a previous order with the same details (client, side, stock, price, and volume). If there is a similar order entered previously by the trader, the system informs the trader and the trader has the option to either proceed or cancel the new order.

#### **4. Fiduciary Risk**

As a Trading Participant of the PSE, a broker has a duty to avoid conflicts of interests and if the same cannot be avoided, to ensure that its clients are fairly treated and are properly informed of such conflicts of interest.

A breach of fiduciary duties to customers could result in a potential financial or reputational loss. In order to manage this risk, especially in the custody and processing of customers' cash and securities, a comprehensive and detailed set of procedures have been established to ensure that obligations to clients are discharged faithfully and in accordance with the governing legal and regulatory requirements.

#### **5. Risks Associated with the Stock Brokerage Business**

This is intrinsically linked with market risk, which is inherent in any investment service or product. Market risk is the risk that the investment will not be as profitable as the customer expected due to market volatility or the risk that prices or rates will adversely change due to economic forces.

The Company expects its brokerage services to continue to account for a portion of its revenues. Like other securities firms, revenues are influenced by trading volume and prices. In periods of low volume and transaction revenue, the Company's financial performance may be adversely affected because certain expenses remain relatively fixed.

The Company believes that the market for its services will eventually lead to a borderless and seamless environment especially in the flow of transactions and capital in various markets. Given that regulatory approval for such services is possible in the near future, the Company is strategically prepared to allocate resources to develop its infrastructure to meet this need. The Company is also constantly exploring additional revenue opportunities to support the business.

## **6. Risk Associated with Potential Local and Foreign-based Competition**

The Company expects to encounter direct and indirect competition from local and foreign firms offering brokerage services, established trading participants, as well as software development companies, banks, and other financial institutions which might establish their own securities system and integrate this with their other product lines.

With its long-established business relationship with its customers, the Company anticipates that it will be able to retain its existing customers. The Company also believes that the cost structure of foreign-based online companies and the relative size of stock market investors in the Philippines presently limit potential foreign competitors from aggressively participating in the local market. Furthermore, with the current low penetration rate of investors in the stock market, the Company believes that there is a huge potential for investor growth in the Philippine market.

## **7. Operational Risks**

To reduce operational risks due to employee and other human related errors, the Company has committed to use technology to such an extent that it brings innovative products and practices in its daily operational processes. The Company constantly works toward automating more of its internal processes using the latest technologies both in terms of hardware and software. The Company's automated processes have gone through rigorous testing prior to implementation to ensure increased operational efficiency and minimize human error leading to controlled risk. These applications and hardware are continuously updated to address the increasing number of transactions and needs of their users.

The Company's organizational structure provides for adequate segregation of duties between the front office and the control and support functions in charge of supporting, recording, verifying, and monitoring transactions. The Company ensures that in handling business transactions, activities that provide scope for conflicts of interest are carried out by different persons.

## **8. Manpower Risk**

The Company's operations largely depend on its ability to retain the services of existing senior officers and to attract qualified senior managers and key personnel in the future. The officers of the Company are professionals from the finance industry as well as entrepreneurs with decades of experience in the Philippine stock market. The separation from the service of any key personnel could have a material adverse effect on the Company's business and financial performance. However, the fact that certain key officers have an equity stake in the organization reduces this risk.

In addition, some technical personnel are covered by employment contracts which allow the Company to plan for expected personnel movements. The Company also owns the source codes for its operating software, giving it the ability to replace technical personnel at minimal, if at all, disruptions in operations.

## **9. Compliance Risks**

As a publicly listed trading participant, the Company is subject to a plethora of compliance regulations. The Company may be subject to penalties, including fines and potential suspension of licenses or the trading of its shares in case it is unable to comply with these regulations.

In response, the Company has appointed several personnel to be primarily in charge of compliance with regulatory disclosures. It has invested in the training of these personnel, some of whom already attained the associated person license from the Securities and Exchange Commission.

## **10. Technology Risks**

The stock brokerage services industry and the delivery of financial services are characterized by rapid technological change, varying customer requirements, the introduction of new products and services, and emerging new standards. Should new industry standards and practices emerge, the Company's technology may become obsolete. The Company is well capitalized with over P550.00 million in paid-up capital, giving it the ability to make its system flexible and adaptable to new technologies and changing customer needs. It also has a strong and excellent team of IT programmers and consultants with years of experience and proficiency in the intricacies of trading-related programs.

## **11. Privacy and Information Security Risk**

Most companies, including all members of the stock brokerage services industry, handle personal data of its clients, employees, and other stakeholders. It is the objective of the Company to secure and protect this personal information from unauthorized access, use, examination, disclosure, modification, copying, moving, or destruction. The safeguarding of personal data, which includes, among others, contact information, financial, family or work-related information of individuals, is of prime importance to the Company.

The Company has identified and commenced the implementation of the following initiatives to address these risks:

- a. Enterprise Architecture Review with Security Principles

This covers an organization-wide assessment of how all IT components, business structure and processes should interact in a holistic manner to meet business goals while ensuring that specialized security insight is always present during the review.

b. Full Infrastructure Visibility with 24/7 Operations Monitoring

The purpose of this is to establish full visibility to all activities that occur in the infrastructure at all times. This requires the centralized collection of statistics of all the network chokepoints in the infrastructure, as well as logs from all the servers and individual workstations. Skilled personnel are assigned to monitor the network activities and system behavior 24/7.

c. Manned Correlations and Security Analysis

The objective is to establish a Security Operations Center (SOC) composed of a group of Security Analysts that specifically look at a collection of events that initially may not mean anything significant by themselves, but once correlated together, infer that a security incident is taking place. Having a SOC in place provides constant detection of threats to an organization in real-time.

d. Vulnerability Management

The Company implements continuous discovery, prioritization, and remediation of vulnerabilities throughout the organization. This involves handling the task of vulnerability scanning, vulnerability remediation task and management to ensure that these are all done in a timely manner.

e. Integration of Static and Dynamic Code Auditing Phases into the Existing Software Development Life Cycle (SDLC)

Code auditing phases will be integrated in strategic parts of the organization's SDLC to ensure constant checks and remediation throughout the process.

In addition, the Company has undertaken and is constantly finding ways to further improve the following data privacy efforts:

- a. Ensuring compliance with privacy laws and industry best practices, to limit the collection, use, disclosure, and retention of personal information;
- b. Establishing oversight and accountability for privacy within each program and process areas;
- c. Fostering a top-down / bottom-up privacy culture;
- d. Developing, implementing, and maintaining privacy policy and practices to clarify personal information management requirements for clients, employees, and outsourced functions;
- e. Establishing complaint and feedback mechanisms to address privacy concerns;
- f. Monitoring protection performance through audits or assessments – to incorporate privacy as part of ongoing quality assurance activity, identifying gaps and needed enhancements;
- g. Developing response protocols to ensure appropriate escalation and management in case of a major privacy incident or breach;

- h. Using encryption techniques to ensure that personal information is appropriately secured when stored;
- i. Providing ongoing awareness through regular employee training and communications;
- j. Reviewing privacy incidents, analyzing trends and incorporating insights to enhance processes and systems; and
- k. Accessing external expertise and resources available from privacy professionals and companies.

## **12. Business Disruption Risk**

Due to the nature of unpredictability of the stock market industry, there will be instances wherein the market movement will cause unusually high volumes of transactions, which in turn can cause unexpected loading on the computing resources of the Company. Even though the Company has a buffer for market swings that would cause sudden increases in resource utilization, the Company has implemented additional measures to further guard against these sudden market spikes.

The COVID-19 pandemic may also cause disruptions to the Company's operations. The highly infectious nature of this disease, coupled with the continued imposition of the community quarantine has severely limited the movement of all persons in Metro Manila, including the Company's employees. Upon declaration of enhanced community quarantine in March 2020, the Company immediately implemented its business continuity measures to ensure that key business functions and normal operations can continue effectively and efficiently while allowing majority of its staff to safely work from their homes.

Aside from hampering movement of its personnel, the limitations imposed by the quarantine may also cause disruptions in the delivery of services of the Company's suppliers, which may adversely impact how the Company is able to serve its clients.

## **13. Risk of Power Interruption / Power Failure**

Power interruption and power failure can adversely affect the efficient execution of the Company's transactions and operations. Currently, all servers and equipment are connected to their own UPS systems, which provide backup power. This is enough to power the machines until trading has completed and the building generator is powered on.

All servers are connected to UPS systems connected to the building generator-enabled outlets. The Company's primary backup facility is in Pasig City. This will eventually be replaced by a more modern BCC located outside of Metro Manila. The facility will run as hot standby, allowing for an automatic switch over should there be any inability of the main computer center in Ayala to function.

In the event of a total power failure or other disaster, the backup site is where the Company's data center will be recreated, and where all its technical operations will emanate from, for the length of the power failure/ disaster.

The Company's development strategy includes the deployment of all appropriately configured backup hardware and software in a backup data center. The backup site is of a 'Hot' nature that has a virtual mirror image of the Company's current data center, with all systems configured. All trading and customer data are transferred from the main site to the backup facility at the end of each trading day to ensure that in case of complete failure on the primary site, only one day's worth of data at the most will be lost. Any and all changes made to system and application software are also done to the backup site systems.

Should the primary site experience a complete failure, the Company will enact its site disaster recovery plan. The technical personnel are instructed to proceed to the backup site and start-up the backup data center. The last saved data will be loaded into the machines and all hardware, communications equipment, and communication lines will be tested.

Connectivity to the PSE will be tested together with internet functionalities. The DNS for the site of the Company will be made to point to the assigned public address of the ISP on the backup site. The technical team will then perform mock trading operations using the newly activated backup center from trading to back-office processing and will give the go signal to top management that the backup data center is already fully operational.

#### **14. Risks of Infringement**

The Company may receive notices of claims of infringement on the proprietary rights of other groups, which may result in litigation against the Company. Any such claims, with or without merit, would be time-consuming to defend against, may result in costly litigation, divert resources and time and otherwise require the Company to enter into some form of royalty and licensing agreement, which may not be on reasonable terms. The assertion of an infringement or prosecution of such claims may have a material adverse effect on the Company's business, financial position, and operating results.

The Company uses proprietary systems and maintains a policy of purchasing its hardware and software requirements only from licensed dealers and manufacturers.

#### **15. Trader Risk**

There exists the possibility that a trader the Company employs takes outsized risks when trading the Company's capital. To mitigate this, the Company employs a multi-factor approach.

First, as a trader is onboarded, they are trained by seasoned veterans in the skills they will need. Second, each trader's position is monitored closely by Risk Management personnel that provides reports to senior management daily. Last, a trader's portfolio is only increased when they have proven that they are equipped with the expertise and discipline to manage the Company's capital responsibly.

## **16. Suitability Risk**

There is also a risk that a trader handling client accounts may enter into transactions that are not suitable to the financial needs and character of the client. In order to mitigate this, prior to onboarding a client, the Company is required to conduct an interview to determine the financial capacity and character of the prospective client. The Company shall look into factors which might affect the prospective client's investment profile, including, among others, his age, investment horizon, other investments, liquidity requirements, and risk appetite. The Company shall only accept the client if it has reasonable grounds to believe that the investments and the Company's proposed strategies are suitable for such customer.

## **17. Platform Risk**

While the Company uses its own infrastructure to execute trades for the Philippine market, it relies on other providers to enact proprietary trades for other countries. Not having complete control of this resource means there is a possibility that their partner is unable to execute trades in a timely basis. To minimize the chances of this happening, the Company makes sure to perform its due diligence on each platform it deals with and selects ones that have a proven track record. The Company is always looking to reduce the impact of this problem by opening accounts with other providers to make sure it isn't fully reliant on any single one.

## **18. Control Risk**

While the nature of the client account management business affords the Company with the authority to execute trades on the client's behalf, ultimate control of the portfolio remains with the client. With this, there is a risk that the client disregards the agreed investment strategy and recommendations and enter into trades that may be disadvantageous to their own account. To address this issue, the Company makes sure that the rationale supporting each decision and suggestion is fully explained to the client to avoid any discord.